Magnolian warns of potential flooding disaster in viaduct tunnel

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By Russ Zabel

Gene Hoglund, coordinator of Citizens for an Elevated Solution, thinks the plan to replace the Alaskan Way Viaduct with a tunnel is a bad idea for a host of reasons.

They include the huge cost compared with a rebuild option, a steep grade at one point and the potential for a Boston Big Dig–style fiasco.

But his latest objection is based on a terrifying and timely concern: that an earthquake along the Seattle fault could generate a tidal wave that would flood the tunnel and drown everyone in it.

"It would fill the hole which is the tunnel, and nobody would get out," is how Hoglund put it.

He's not being hysterical; the Magnolia resident has found evidence that backs up his fear.

Indeed, a tsunami generated by a Seattle fault quake slammed into land around Elliott Bay in A.D. 900–930, according to a 2003 study by the Washington State Department of Natural Resources and the National Oceanic and Atmospheric Administration.

Titled "Tsunami Hazard Map of the Elliott Bay Area, Seattle, Washington: Modeled Tsunami Inundation from a Seattle Fault Earthquake," the study notes that sedimentary evidence of a local tidal wave was discovered in 1992.

The wave inundated parts of Whidbey Island and West Point, according

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to the study, which adds that a sand layer along Snohomish River distributaries "also probably was deposited by the tsunami from the large A.D. 900–930 earthquake on the Seattle fault."

The study used computer modeling that "simulates the A.D. 900–930 event as a credible worst-case scenario of magnitude 7.3." Computed velocities of a tidal wave in Elliott Bay exceed 40 miles per hour, while wave heights were approximately six meters (around 16 feet), according to the study.

"Note that because Harbor Island is uplifted by the earthquake," the study adds, "the Duwamish Waterway initially drains rapidly before the wave reflects off the north side of the bay and then inundates the Harbor Island Area."

Hoglund points out that transportation planners believe there is a one-in-20 chance that the viaduct will be damaged by an earthquake in the future. "An earthquake could also cause a tsunami," he stressed.

Hoglund said he brought up this new hazard of a tunnel replacement for the viaduct at a Washington State Transportation Commission meeting on Jan. 19. "WSDOT is putting a large number of Seattle citizens at risk for this waterfront development project," he testified.

The citizen said he also contacted State Rep. Helen Sommers, D–36th District, about the danger to the tunnel from a tidal wave. "Helen had never heard of it," he said.

"That was pretty startling," Sommers said of the news about the potential for a local tsunami. "Who would have thought we could get one on Elliott Bay?"

Sommers chairs the appropriations committee in the legislature, although she pointed out that any decisions about the viaduct-replacement project will come out of the transportation committee.

She believes the tidal-wave danger will have an effect on the debate about replacing the viaduct, although Sommers noted the subject will have emotional overtones because of the recent tsunami in the Indian Ocean.

Neil Twelker, a Queen Anne engineer who is working with Citizens for an Elevated Solution, said the Seattle fault has been in the back of his mind, but the tsunami study brought it into sharper focus.

"I'm just as astounded as everyone else is," he said of the study's conclusions. "Apparently geologists have concluded it is a real thing, and it sure as hell could happen."

NO KIDDING: *scientific evidence for tsunami fear*